# **Review Panel Members Bios**

## William Fleenor, Ph.D.

Dr. William Fleenor's primary research interests involve hydrodynamic mixing in lakes, rivers, and estuaries as it relates to water quality in natural and engineered systems. He is the leading hydrologic, hydraulic and water quality modeler for the Center for Watershed Sciences.

Dr. Fleenor uses field data collection and computer models to examine how physical properties of water influence water quality in rivers, lakes, reservoirs and estuaries.

All his work focuses on finding solutions for existing problems. Recent work includes projects with Yolo County, State Water Resources Control Board, Central Valley Regional Water Quality Control Board, FEMA, and the Delta Stewardship Council.

While recently retired from UC Davis, he remains involved with research in the Center for Watershed Sciences.

William Fleenor, Center for Watershed Sciences, (530) 219-2351, wefleenor@ucdavis.edu.

#### Dr. Peter Goodwin

Peter Goodwin is the founder of the Center for Ecohydraulics Research at the University of Idaho, an interdisciplinary group which works on the simulation of ecological response due to management actions or changes in physical processes of rivers, lakes, estuaries and wetlands.

His research interests are in modeling physical processes in natural and disturbed aquatic systems, and quantifying benefits of restoration activities.

Dr. Goodwin has participated in river restoration, flood control and sediment management projects in several different countries. Research in watershed management issues include: the Deadwood River, Coeur d'Alene River basin, the Upper Salmon River basin and the Lake Amatitlan watershed in Guatamala. He has undertaken several multi-objective river enhancement plans that address flood hazard reduction, ecological enhancement, water quality, habitat and recreational opportunities.

During a 2003-04 sabbatical, he was part of the team that established the multi-national Patagonian Ecosystems Research Center (CIEP) in Chile.

Dr. Goodwin has taught undergraduate, graduate and continuing education courses in fluid mechanics, hydraulic engineering, sediment transport, hydrology, aquatic ecosystem restoration and computational hydraulics. Dr. Goodwin earned his doctorate in Hydraulic Engineering at UC Berkeley.

## **Dr. Nancy Monsen**

Dr. Monsen's research has focused on multi-dimensional hydrodynamic modeling of the Sacramento-San Joaquin Delta for the last twenty years.

Her Ph.D. research was based on the TRIM3D hydrodynamic model and recently she been working on Stanford's SUNTANS hydrodynamic model. She also has consulting experience with the DELFT3d hydrodynamic model. She is a visiting scholar in the Environmental Fluid Mechanics Laboratory, part of the Civil and Environmental Engineering Department, at Stanford University.

She has worked previously as a research associate at Stanford for two years, a consultant for ESA PWA (formerly Philip Williams and Associates) for a year and a half, and at the U.S. Geological Survey (Menlo Park, National Research Program) for ten years. She has recently been on several science review panels including the Independent Review of the Draft Bay Delta Conservation Plan Effects Analysis (2014) and the State of the Science Workshop on Fish Predation on Central Valley Salmonids in the Bay-Delta Watershed (2013).

Dr. Monsen earned her doctorate in Civil and Environmental Engineering at Stanford University.

### Catherine Ruhl

Catherine Ruhl earned her master's degree in Civil and Environmental Engineering at Stanford University.

Ms. Ruhl started working for the U.S. Geological Survey in the California Water Science Center in 1996.

Catherine Ruhl worked on suspended-sediment dynamics in San Francisco Bay for several years.

Then in 2000 she transitioned to projects in the Sacramento-San Joaquin Delta.

For 10 years she has been the project lead for the Sacramento-San Joaquin Delta Flows Network, responsible for monitoring flow and water quality in the Delta.